

Students win Competitive Training Awards

Three DMD/PhD students have won nationally competitive individual (F30) training grants to support their research training. They are David Manz, Michelle Spoto, and Matthew Zambrello. All of the NIH institutes and centers support research training to prepare the next generation of investigators to meet future biomedical challenges. NIH provides this support through grants to institutions (T/R awards) and individuals (F/K awards). The SDM has maintained an institutional training grant in Skeletal, Craniofacial and Oral Biology for over 30 years. Dr. Mina Mina is the director of our current T90 training grant.



Per Dr. Jon Goldberg, Co-Director of the training grant, “The T90 provides financial support for trainees and other academic enhancements, and one of the expectations for all trainees is the submission of an individual F award. NIH provides F awards for pre-doctoral (F31), postdoctoral (F32) and MD or DMD/PhD (F30) trainees. There are three main reasons for encouraging our trainees to submit an F application. First, NIH expects T90 trainees to submit. Second, the process gives trainees excellent experience in preparing grant applications. Third, history has shown that F award recipients have greater success with extramural funding during their careers. The review of F awards by NIH includes consideration of both the proposed research as well as the potential of the individual for a successful research career. We are very proud of the success that our trainees have had with F awards.” Pending submissions: Dr. Cory Brunson, Hank Hrdlicka and Veneta Qendro.



David Manz is a DMD/PhD student working in Drs. Suzy and Frank Torti's laboratory. David's research is focused on understanding the mechanisms by which iron contributes to cancer progression. David's professional goal is to become a Dental School faculty member where he can continue to pursue research and teach.

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Michelle Spoto is a DMD/PhD student working in the lab of Dr. Julia Oh at the Jackson Laboratory studying gene function in *S. epidermidis*. *S. epidermidis* is the most common cause of hospital-acquired blood stream infections and methods of prevention and treatment are critically needed. Michelle is working to develop a CRISPR-based genome-wide screen in this important organism to identify genes that are necessary for growth under pathogenic conditions. In the future, she hopes to apply the methods in genetic engineering, microbiology, and genomics that she is learning in Dr. Oh's lab to study organisms of the oral microbiome to better understand this complex community.



Matthew Zambrello successfully defended his PhD thesis titled "Computational Approaches for Assessing Spectral Quality in Protein NMR Spectroscopy". During his thesis research, he studied the computational workflows involved in solving the three-dimensional structure of a protein under the direction of Dr. Jeffrey Hock, published two peer-reviewed first author publications, with a third paper that is currently being edited. The first article detailed the development of a novel technique for assessing spectral quality and the next two articles entail applications of this technique to various problems in NMR. Understanding the triad of NMR spectroscopy, protein science and computational techniques facilitates the study of dental development and disease from a structural standpoint. In the future, Matthew would like to first complete a post-doctoral study to continue development of his research skills and subsequently enroll in a periodontology residency program that emphasizes a research component.



Have you received a recent award, accomplishment or have some interesting news to share with the SDM Research Community? Please forward your news to Lisa Ramsdell (ramsdell@uchc.edu) so it can be included in our next newsletter!

Student and Trainee Recognition



Congratulations to Dr. Anushree Vijaykumar (mentor Dr. Mina) who was a finalist in the AADR Hatton Senior Competition held in Ft. Lauderdale, Florida in March.

Dr. Tadinada with the SDM residents prior to the start of the CSDA resident's poster session held at Mohegan Sun from May 10-11.



CSDA 2018 Dental Student/Resident Research Poster Session



Dr. Tadinada, Anjali Dinesh, Callan Donovan, Ross Camiel, Henry Chen & Danielle Brainard at the CSDA dental students' poster session.

Dental student award winners:

1. Nicholas Pray (Mentor: Dr. Tadinada)
2. Tapan Dalal (Mentor: Dr. Lichtler)
3. Ross Camiel (Mentor: Dr. Kalajzic)

Resident award winners:

1. Dr. Joy Chang (Mentor: Dr. Yadav)
2. Dr. Kehinde Babalola (Mentor: Dr. Tadinada)
3. Dr. Melissa Landin (Mentor: Dr. Tadinada)

Faculty Recognition



Congratulations to **Dr. Susan Reisine**, who received the IADR Distinguished Service Award at the recent IADR Meeting held in London.

<http://www.iadr.org/IADR/About-Us/News/ArtMID/132983/ArticleID/523/Susan-Reisine-Received-the-2018-IADR-Distinguished-Service-Award>



Congratulations to **Dr. Rajesh Lalla**, who received the IADR Innovation in Oral Care Award at the recent IADR Meeting held in London.

<http://www.iadr.org/IADR/About-Us/News/ArtMID/132983/ArticleID/526/IADR-Announces-the-2018-Innovation-in-Oral-Care-Awards>



Congratulations to **Dr. Sumit Yadav** for being selected to attend the National Institute on Aging (NIA) Butler-Williams Scholars Program held July 30 -August 3 on the NIH Campus in Bethesda, MD. The B-W scholars program is sponsored and conducted by National Institute of Aging. The B-W scholars program includes seminars and small group discussion in research design relative to aging, including health disparities research related to aging. The opportunity to be accepted to attend B-W scholars program is highly competitive (< 10%).



Congratulations to **Dr. Douglas Peterson** who received the UConn Health Board of Directors Faculty Recognition Award in May.

<https://today.uconn.edu/school-stories/board-directors-honors-dr-douglas-peterson/>



Congratulations to **Dr. Mark Litt** who was recently selected as the new Pre-K Program Co-Director by the Connecticut Institute for Clinical and Translational Science (CICATS).

<https://cicats.uconn.edu/2018/06/07/cicats-announces-selection-of-new-pre-k-program-co-director-press-release/>



List of Presenters



Dr. Khadijeh Al-Abedalla (mentor: Dr. Ioannidou)

Oral presentation: Reporting Quality and Spin in Abstracts of Periodontal-cardiovascular Clinical Trials



Dr. Patricia Diaz

Oral Presentation: Longitudinal Microbiome and Epithelial Changes Associated With Oral Complications of Chemotherapy



Dr. Anna Dongari-Bagtzoglou

Oral Presentation: Synergistic Interactions of Oral Bacteria and Fungi in Oropharyngeal Candidiasis



Dr. Effie Ioannidou

Oral Presentation: Objectives and Structure Resources for Effective Peer Review

Oral Presentation: Overview on Gender Bias in Scientific Publishing

Oral Presentation: Integration of Oral Health Care in ESRD Patients



Dr. Susan Reisine

Oral Presentation: Oral Health Behaviors Among Vulnerable Adults in Low Income Housing

Recent Grant Awards



NIH – F30

Michelle Spoto, DMD, PhD candidate – “Molecular Mechanisms Underlying Transition to Virulence in *Staphylococcus Epidermis*” (Julia Oh, mentor).



NIH – U01 (Competitive Renewal)

Dr. Rajesh Lalla, “Clinical Registry of Dental Outcomes in Head and Neck Cancer Patients (ORARAD)”



Sjogren’s Syndrome Foundation

Dr. Robert Kelly, “Artificial Salivary Gland Dental Implant Development”



Intramural Awards

Dr. Ivo Kalajzic, “Neuropeptide Y as a Local Regulator of Bone Mass”, (Research Excellence Program, Stimulus Grant)



Dr. Tannin Schmidt / Dr. Sumit Yadav, “Investigating PRG4 re-expression as a treatment for TMJ degenerative diseases”, (Research Excellence Program, Convergence Grant)



Total SDM Extramural Research Awards

| Fiscal Year | SDM Research Awards (Total Costs) |
|-------------|-----------------------------------|
| 2010 | \$ 7.69 M |
| 2011 | \$ 13.23 M * |
| 2012 | \$ 7.61 M |
| 2013 | \$ 7.02 M |
| 2014 | \$ 9.44 M |
| 2015 | \$ 8.62 M |
| 2016 | \$ 8.93 M |
| 2017 | \$ 8.61 M |
| 2018 | \$ 9.18 M |

*2011 total includes Recovery Act funding.



Please mark your calendar to attend the **Skeletal, Craniofacial & Oral Biology Research Symposium** which will be held on Tuesday, **September 25** in the Academic Rotunda.

Invited guest speaker will be Dr. Julia Oh.

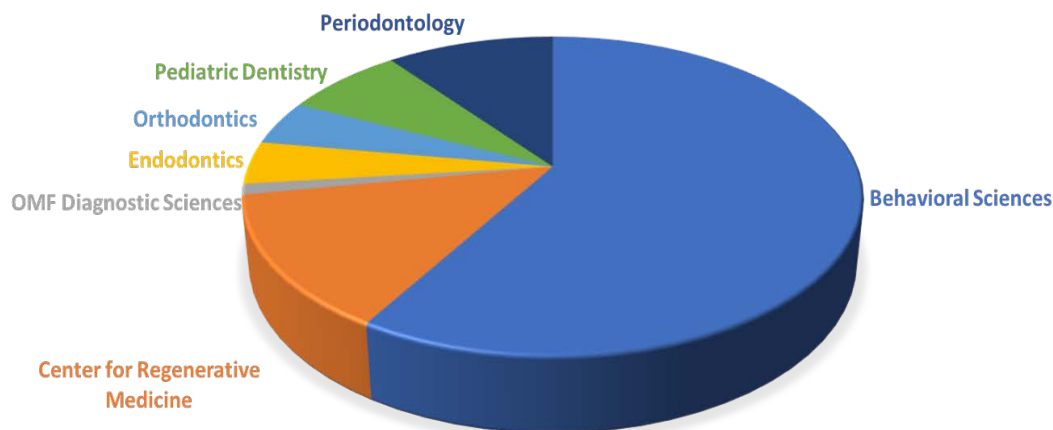
"The human microbiome: from metagenomes to therapeutics"

Opening remarks at 8:45 am; program begins at 9:00 am.



SDM Extramural Funding Received 7/1/2017 – 6/30/2018

FY 18 AWARDS



| SDM Division/Unit | Direct Costs Received in FY18 | Indirect Costs Received in FY18 | Total Grant Awards for FY18 |
|-----------------------------------------------------------|-------------------------------|---------------------------------|-----------------------------|
| Behavioral Sciences | 4,542,877 | 841,596 | 5,384,473 |
| Center for Regenerative Medicine and Skeletal Development | 799,090 | 448,160 | 1,247,250 |
| Endodontology | 250,000 | 148,750 | 398,750 |
| OMF Diagnostic Sciences | 64,276 | 34,450 | 98,726 |
| Orthodontics | 405,381 | 12,910 | 418,291 |
| Pediatric Dentistry | 647,975 | 32,743 | 680,718 |
| Periodontology | 601,642 | 357,410 | 959,052 |
| TOTALS | 7,311,241 | 1,876,019 | 9,187,260 |

Research Resources

Lincus Software

The Office of Vice President of Research has developed a software program for UConn faculty, staff and students that allows you to easily search the research topics and publications of our faculty. This requires the use of your Net ID and password to enter the system. Please try it out since it could be invaluable for helping you to locate existing equipment and expertise here at UConn that might further your own research. It's kind of fun because you get a map of who you have published with and a list of keywords associated with your research as shown below. To access the program:

<http://lincus.uconn.edu>



Statistical Support for Dental Residents in Masters Programs

Chia-Ling Kuo, PhD

Assistant Professor

Biostatistics Center, CICATS

kuo@uchc.edu

Pre-submission Reviews of Grant Proposals

UConn has a contract with a research consulting firm called Hanover Research. They provide a range of services including pre-submission reviews of grant proposals and helping faculty incorporate feedback for resubmission. They work on one project at a time for the University so requests are prioritized based on strategic needs and deadlines. SDM faculty are encouraged to consider applying to utilize their services.

If interested, please email Dr. Lalla at Lalla@uchc.edu, well in advance of your submission deadline.

Research Dean's Corner



Dear Colleagues,

Welcome to the summer issue of the SDM Research Newsletter. In our cover story, we celebrate 3 DMD/PhD students who have won national-level individual training awards (F30 grants). Congratulations to David Manz, Michelle Spoto, and Matthew Zambrello, as well as their research mentors! I also want to recognize the efforts of Dr. Mina Mina, Director of our T90 training grant, and Dr. Jon Goldberg, Co-Director, in encouraging and supporting our trainees to achieve this national recognition.

Our School had a good presence at the recent International Association for Dental Research (IADR) meeting in London, with several oral presentations, listed in this issue. A special Congratulations to Dr. Susan Reisine who received the highly prestigious Distinguished Service Award from the IADR!

In this issue, we also present data on extramural research funding received in fiscal year 2018, and funding over the last several years. It is encouraging to see that our total extramural funding received in FY2018 is higher than in the past 3 years, and is over \$9M. With the recent recruitments to Biomedical Engineering, and strategic efforts in other areas, we are well-placed to move past the \$10M mark in the coming years. Increased extramural funding translates into generation of new knowledge, additional training opportunities, and a stronger institutional profile. Thank you to everyone who is working hard to secure extramural funding in this competitive climate.

Best wishes,

Rajesh V. Lalla, DDS, PhD

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